SFUND RECORDS CTR 2322920

acd 6/15/93

ENVIRONMENTAL BASELINE SURVEY
PHASE 1 THROUGH PHASE 3
HARRIS DRACON DIVISION FACILITY
9541 MASON AVENUE
CHATSWORTH, CALIFORNIA 91311
VOLUME I

Prepared for:

Harris Dracon Division Facility 9541 Mason Avenue Chatsworth, California 91311

February 11, 1991

Prepared by:

Geraghty & Miller, Inc.

Environmental Services
17800 Castleton Street, Suite 175
City of Industry, California 91748
(818) 965-4048

ENVIRONMENTAL BASELINE SURVEY REPORT PHASES 1 THROUGH 3

Harris Dracon Division Facility 9541 Mason Avenue Chatsworth, California 91311

This environmental baseline survey has been prepared by Geraghty & Miller, Inc.'s, Southern California office in the City of Industry, California.

G&M Project No. CA12301

by

Dana J. Coyle

Project Manager

Hydrogeologist

Michael E. Shiang Project Officer

California Registered Environmental Assessor, No. 1616

CONTENTS

<u>PAG</u>	ĿĿ
INTRODUCTION	1
OBJECTIVES	1
BACKGROUND	2
LOCATION	2
Hydrogeologic Setting	
CURRENT ADJACENT LAND USE	
Aerial Photograph Review	5
DESCRIPTION OF SITE AND SURROUNDING AREA	6
SITE INSPECTION AND EMPLOYEE INTERVIEWS	
Operations and Processes	8
Iridite Area	9 10 13 14
HAZARDOUS WASTE STORAGE AREA	15 16 17
REGULATORY REVIEW	18
HAZARDOUS WASTE AND/OR SUBSTANCE SITES LIST	18
ABANDONED SITES PROGRAM INFORMATION SYSTEM (ASPIS) BOND EXPENDITURE PLAN	19 19 20 20 21
	21

CONTENTS (CONTINUED)

<u>]</u>	PAGE
Waters Bill: Hazardous Materials Storage and Emergency Response Plans and Inventory Law (AB 2185, et al)	. 22
La Follette Bill: Acutely Hazardous Materials Risk Management (AB 3777, et al)	
CALIFORNIA HAZARDOUS WASTE CONTROL LAW (HWCL)	. 23
HWCL/RCRA Interface	. 24
HAZARDOUS WASTE TAXES AND GENERATOR FEES DEPARTMENT OF HEALTH SERVICES (DHS) REGION III FILE	
REVIEW PERMIT COMPLIANCE REVIEW	
Wastewater Permit No. 381321 Spray Booth Permit No. M31409 Spray Booth Permit No. M31410 Oven Permit No. M31411 Degreaser Permit No. D33283 Permits to Operate Air Pressure Tanks No. 725918 and 57116	. 31 . 32 . 33 . 33
AREAS OF CONCERN	. 34
IRIDITE AREA CLARIFIER HAZARDOUS WASTE STORAGE AREA LOADING DOCK SUMP COMPRESSOR/METAL DEGREASING (NORTHWEST SIDE OF THE EXTERIOR OF THE BUILDING)	. 34 . 34 . 35
FINDINGS	. 35
RECOMMENDATIONS FOR PHASE 4 FIELD INVESTIGATION	. 39
IRIDITE AREA CLARIFIER AREA HAZARDOUS WASTE STORAGE AREA LOADING DOCK SUMP COMPRESSOR/METAL DEGREASING (NORTHWEST SIDE OF THE	. 42 . 42 . 42
BUILDING)	
REFERENCES	. 44

LIST OF TABLES

- 1. Major Chemicals Used at Harris Dracon
- 2. Hazardous Waste Generated by Harris Dracon During 1990
- 3. Permits and Licenses
- 4. Phase 4 Analytical Scheme

LIST OF FIGURES

- 1. Site Location
- 2. Site and Surrounding Land
- 3. Site Plan
- 4. Aluminum Process Flow
- 5. Steel Process Flow
- 6. Plastic Extrusion, Molding, Manufacturing
- 7. Proposed Sampling Location Phase 4 Field Investigation

LIST OF APPENDICES

- A. Hydrogeologic Information
- B. Permits and Licenses
- C. CERCLIS
- D. FOIA Request
- E. Cortese List
- F. ASPIS List
- G. LUST List
- H. Business Plan
- I. Hazardous Training Manual
- J. Emergency Evacuation Plan
- K. Hazardous Waste Tax Records and Generator Fee Records
- L. Department of Health Services Region III File Excerpts
- M. EPA Periodic Compliance Records
- N. South Coast Air Quality Management District Information

PROJECT TEAM

Project Officer

Michael E. Shiang

Senior Project Advisor

Anthony C. Ward

Project Manager

Dana J. Coyle

Staff Engineer

Wayne M. Frank

Draftsmen

Dennis C. Childs Jack Becker James Mallorey

Word Processing

Seltzer A. Carter Peggy L. Phillips

INTRODUCTION

In November 1990, Geraghty & Miller, Inc. (Geraghty & Miller) was retained by the Harris Corporation to conduct an environmental baseline survey at the Harris Dracon Division (Harris Dracon) facility located at 9541 Mason Avenue, Chatsworth, Los Angeles County, California. The environmental baseline survey was conducted in accordance with the scope of work as outlined in the November 5, 1990 proposal.

OBJECTIVES

The purpose of the environmental baseline survey is to identify and determine the significance of environmental liabilities associated with past or present operations at the facility. Emphasis was placed on chemicals used and the potential for environmental releases to the soil, air, and ground water from chemical waste handling practices, disposal practices, and past or current facility operations. The environmental baseline survey was conducted in four phases. The findings of Phase 1 through Phase 3 are contained in this report along with recommendations for Phase 4 work.

The environmental baseline survey was developed as a phased approach. Phases 1 through Phase 3 were limited to analysis of existing data obtained from the facility. Soil sampling, ground-water well installation or monitoring, or other data collection efforts were not performed as part of these initial three phases. Recommendations for these types of activities have been included in this report and will be conducted during Phase 4.

This report is divided into the following sections: background, description of site and surrounding area, regulatory review, potential contamination and environmental problems, findings, and recommendations for Phase 4 field activities. The report describes processes, operations, and types of chemicals used in each area. The observations and noted environmental concerns are discussed in a later section titled "Areas of Concern". Supporting information, including site diagrams and maps, inspection photographs, and regulatory program data are included in the Appendices.

BACKGROUND

The following section provides background information for a more complete understanding of the setting of the site and site history.

LOCATION

The Harris Dracon Division facility (Harris Dracon or site) is located at 9541 Mason Avenue, Chatsworth, Los Angeles County, California. Chatsworth is a part of the City of Los Angeles. The site is located in Township 2 North, Range 16 West, Section 17. The site location is delineated in Figure 1, which is based on the U.S. Geological Survey 7.5 minute Canoga Park and Oat Mountain Quadrangles.

Harris Dracon is situated in an industrial complex that is bordered to the north by Superior Street, to the south by Plummer Street, to the east by Mason Avenue, and to the west by Cozycroft Avenue. The surrounding area is a mixture of residential and industrial property (Figure 2, Photographs 1 to 5).

TOPOGRAPHY

Chatsworth is situated in the Transverse Ranges Physiographic Province of California. Harris Dracon is located at an approximate elevation of 895 feet above mean sea level (msl) in the northwestern portion of the San Fernando Valley. The valley is bordered on the northnorthwest by the Santa Susanna Mountains and on the south by the Santa Monica Mountains. The elevation within 6 miles of the site ranges between 3,747 feet above msl at Oat Mountain Lookout in the Santa Susanna Mountains to 720 feet above msl along portions of the Los Angeles River in the center of the valley. The valley floor elevation is as low as 460 feet above msl at the Los Angeles Narrows at the mouth of the valley.

Regional drainage is to south toward the Los Angeles River, although most runoff is captured by storm water drains and flood control structures before it reaches the concrete-lined Los Angeles River. Surface water drainage locally at the site flows to the south.

HYDROGEOLOGIC ENVIRONMENT AND WATER RESOURCES

This section provides a brief description of the hydrogeologic setting, water quality, current land use and history of the site.

Hydrogeologic Setting

Harris Dracon lies within the South Coastal Ground-Water Basin as defined by the Department of Water Resources Bulletin 118 (DWR, 1975). In 1980, the Department of Water Resources delineated additional ground-water basins that reflected political boundaries to facilitate ground-water basin management. Under this classification, the site is located in the San Fernando Valley Basin (DWR, 1980). The San Fernando Basin is the largest of four basins in the Upper Los Angeles River Area (ULARA). The San Fernando Basin covers 112,000 acres and comprises 91.2 percent of the total valley fill. The basin is bounded on the east and northeast by the San Rafael Hills, Verdugo Mountains, and San Gabriel Mountains; on the north by the San Gabriel Mountains and the eroded limb of the little Tujunga Syncline which separates it from the Sylmar Basin; on the northwest and west by the Santa Susanna Mountains and Simi Hills; and on the south by the Santa Monica Mountains (ULARA Watermaster, 1990).

Urban development in the past few years has resulted in much of the rainfall being collected and routed into paved channels that exit the basin via the Los Angeles River. To offset this loss of water, spreading basins are operated by the Los Angeles County Department of Public Works and the City of Los Angeles to replenish some of this lost water.

The San Fernando Valley Basin has an estimated ground-water storage capacity of 3.4 million acre-feet and an unusually large usable ground-water capacity of 3.2 million acre-feet.

The average well yield for the San Fernando Valley Basin is 1,220 gallons per minute (gpm), with maximum yields being 3,240 gpm (DWR, 1975). The ground-water surface elevation in the Chatsworth area ranges between 800 to 975 feet above mean sea level (Appendix A). The ground-water surface near Harris Dracon is approximately 800 feet above mean sea level or approximately 95 feet below the ground surface (ULARA Watermaster, 1990).

Ground-Water Quality

In the western part of the ULARA, the water tends to be high in calcium sulfate-bicarbonate (ULARA Watermaster, 1990). Ground-water contamination has not been documented adjacent to the site; however, leaking underground storage tank sites are located with 0.5 mile of the site.

Surface-Water Resources

Harris Dracon is located 0.75 miles east of Browns Canyon Wash, 3.5 miles north of the Los Angeles River, and 2 miles east of the Chatsworth Reservoir. These surface water features are dry most of the year. The area is dry, typically receiving an average of 16 inches of rainfall per year. In recent years the area has been experiencing a drought, and yearly rainfall is well below average.

CURRENT ADJACENT LAND USE

The area surrounding the Harris Dracon facility is primarily industrial and residential. Adjacent land use is shown on Figure 2 and Photographs 2 to 5. Harris Dracon immediately abuts a tilt-up building to the south. Harris Dracon employees did not know the nature of the activity conducted in that building, but the tenant is relatively recent. When Geraghty & Miller personnel asked the security guard on duty at the building the type of business conducted in the building, he did not divulge it. The building did not have a sign or other type of placard with the facility name.

The building to the north of Harris Dracon is separated from it by a driveway. This building houses several men's clothing import/export businesses (Photograph 3). A large residential development lies directly to the east of Harris Dracon, across Mason Avenue (Photograph 4). An industrial building complex that faces Cozycroft Avenue is located to the west of Harris Dracon. This building houses Delta Industries who manufactures slides for draws, Kintec Inc. that manufactures subsea electrical connections, and Bottomline that repairs computers (Photograph 5).

SITE HISTORY

Dracon Industries moved to 9541 Mason Avenue, Chatsworth, California in 1974. Dracon Industries was the first tenant of the 50,900 square foot building owned by Gerald M. Bronstein Industrial Partnership. At that time Dracon Industries was supplying the telecommunications industry with over 644 catalogue items. In 1980, Dracon Industries became part of the Harris Farinon Group when the Harris Corporation and the Farinon Corporation merged. Harris Dracon continues to service the telecommunications industry, although its range of specialty products has expanded considerably since operations began at the site in 1974.

Aerial Photograph Review

Relatively recent aerial photographs of the site were viewed at a commercial photographer's studio. Based upon a review of an aerial photograph taken in 1972, the site and property immediately adjacent to it appear similar to the present conditions. In addition, the conditions of industrial complexes of buildings that surround the facility and the residential neighborhood to the east across Mason Avenue appear to have remained the same since 1972.

The Fairchild Aerial Photograph Collection, at Whittier College, contained historical aerial photographs of the site and surrounding area taken between 1928 and 1954. On the earliest photograph taken in 1928, the site property appeared to be undeveloped. The area between what is now Superior Street and Lassen Street was under cultivation as were the areas

east of the site across Mason Avenue, west of the site across what is now Cozycroft Avenue, and south of the site across Plummer Street. By 1930, the site contained a row of what appeared to be immature trees or shrubs. In 1945, the grove on the site appeared mature and each individual tree or shrub appeared quite full and well developed. On a photograph taken on March 15, 1947, the trees/shrubs appear quite different. The branches appear to be barren of leaves, possibly as a result of seasonal changes, or perhaps agricultural techniques (e.g. spraying or pruning). The other agricultural plots immediately adjacent to the site did not exhibit this feature; however, one plot slightly to the south and to the west of the site had trees/shrubs that looked similar to those on the Harris Dracon site. The reason for this change could not be determined from the photograph. On the July 8, 1948 photograph, the next in the series, the trees/shrubs again appeared full and well leafed. A similar phenomena was observed on the photographs taken between November 27, 1950 and the photograph taken on August 15, 1952. In the earlier photograph, the trees do not appear as full and healthy as they do in the latter photograph.

On the latest photograph from the Fairchild Collection taken in 1954, the site and surrounding land was agricultural or vacant. The large residential neighborhood across Mason Avenue to the east had still not yet been built.

There was no evidence from the aerial photograph review that hazardous substance or hazardous wastes had been misused on the facility property. The Dracon Industries was the first tenant in the building. Prior to the construction of the building, the site was either vacant land or agricultural land.

DESCRIPTION OF SITE AND SURROUNDING AREA

The following sections provide information received through site visits and employee interviews. A summary of the operations and processes conducted at the site, including waste handling practices, is included in this section.

SITE INSPECTION AND EMPLOYEE INTERVIEWS

The Harris Dracon facility was inspected on November 15 and 16, 1990 by Ms. Dana Coyle of Geraghty & Miller. Mr. Richard Diaz, Shop Foreman, and Mr. Philip Pinherio, Supervisor/Material Administrator were interviewed. A Geraghty & Miller facility audit questionnaire was completed during the interviews.

The Shop Forman, Mr. Diaz, who has been employed by Dracon Industries/Harris Dracon since the operations began in 1974, provided a tour of the site. Mr. Diaz is knowledgeable about most aspects of site operations, including handling of hazardous substances. Mr. Pinherio, who handles the removal and coordinates the disposal of all hazardous materials from the site, provided information on the handling of hazardous substances and the disposal of hazardous wastes generated at the site. Additional information related to more current activities was provided by Mr. John Bird, Material Manager.

FACILITY DESCRIPTION

Harris Dracon leases the 50,900 square foot, one-story, tilt-up building from Gerald M. Bronstein Industrial Partnership. The City of Los Angeles Department of Water and Power provides electricity and water to the site. Southern California Gas supplies natural gas to the facility. The City of Los Angeles Department of Sanitation provides sewer service to the facility.

The building is constructed of wood laminate beams, on a concrete slab with concrete tilt-up walls, steel uprights and a wooden roof. The facility has a large parking lot in the front of the building; a driveway on the north side of the building leading to the west side of the building; a fenced, locked, and bermed Hazardous Waste Storage Area on the north side of the building; a fenced compressor area on the west side of the building; and a loading dock and material storage area on the west side of the building (Figure 3).

Throughout most of the building, a thin layer of insulating paper covers the ceiling. The ceiling in the office area is suspended acoustic tile. The floors throughout the manufacturing area are sealed concrete with 0.25 inch thick expansion joints; the floor in the office area is carpeted. There are no floor drains in the building. The iridite process water discharges to a clarifier through an outlet on the east side of the building that is connected to the City of Los Angeles sewer system (Photographs 6 to 9). Sanitary sewer lines run from the restrooms to the city sewer system mains on the east side of the building. No sumps, drains or other process lines lie beneath the foundation. Reportedly, no water wells or dry wells exist on the site. In consideration of the facility structure, the potential for soil and ground water to be impacted is minimal.

Operations and Processes

Harris Dracon supplies the telecommunications industry with a wide variety of metal and plastic products. A large volume of its metal operation is devoted to the manufacture of relay racks, cable runways, and sheet metal products. Many of the plastic items are used by servicemen during the installation of cable or repair of telecommunication and data lines. The operations and processes include aluminum and steel cleaning, fabrication, and coating and injection molding of plastic parts. Depending on the type of material -- aluminum, steel, or plastic -- different means of creating a finished product are employed. For the most part, operations at Harris Dracon have remained the same since it occupied the building in 1974. The product output volume, however, has increased significantly in the last few years.

Processes that occur in various areas of the facility are described below. This presentation is not intended as a definitive description of operations at Harris Dracon, but rather to provide a general overview regarding the use, storage, generation, and disposal of hazardous materials and wastes.

The Harris Dracon facility is divided into three major sections: 1) Aluminum Process (including the iridite process); 2) Steel Process; and 3) Plastic Parts Extrusion Molding. Several

smaller auxiliary operations, such as mold and dye manufacturing, are also conducted at the facility. Together these operations make up the Harris Dracon operations and processes. Process flow diagrams prepared by Geraghty & Miller are based on a site visit by Ms. Dana Coyle, telephone conversations with Messrs. Mark Mendenhall and Ed Gaicki of Harris Dracon, and documents provided to Geraghty & Miller by Harris Dracon. These process flow diagrams are provided as Figures 4, 5, and 6. The major chemicals used and their storage areas, as well as the quantity of hazardous waste generated by Harris Dracon, are summarized in Tables 1 and 2. The following discussion briefly describes these three processes, including hazardous materials used and hazardous wastes generated.

Aluminum Process. Large shipments of sheet aluminum are delivered to the facility periodically and stored on the west side of the building in either a locking storage shed or on the southwest side on outdoor racks. Ninety percent of the metal used by Harris Dracon is aluminum.

Sheet aluminum is cut on the northwest side of the building in the Sawing and Deburring Area (Figure 3, Photograph 10). Soluble cutting oil, 360, 390, and 470 Doall, is used in the Sawing and Deburring Area. The Doall is stored in squirt bottles and each machine operator uses an average of less than 1 quart per week. No significant waste is generated in this process. Residual oils remaining on the aluminum are removed during the iridite process which is described in later sections.

Metal pieces that are moved to the fabrication area may be punched, drilled, formed, or tapped (Figure 3, Photograph 11). The lubricant used in these operations is a water soluble 360 and 390 Doall. Drip pans below the machinery, filled with absorbent, catch the excess Doall that flows off the pieces of metal during the fabrication process (Photograph 12). Some of the fabrication machines create more waste than others. This is due in part to the design of the machines and the type of fabrication being conducted at the machine (Photographs 12 and 13). The drip pans are cleaned daily. The used absorbent is disposed and clean absorbent is placed in the drip pans. The Doall used in the fabricating machines is stored in 55-gallon drums in the

Metal Fabrication Area on the north side of the facility (Figure 3, Photograph 14). On the day of the inspection, several small spills were noted around the drip pans. Reportedly, these small spills are cleaned up as soon as possible to avoid accidents. Waste oil is collected in 5-gallon buckets and eventually transported to 55-gallon drums in the Hazardous Waste Storage Area on the north side of the building (Photograph 15).

From the fabrication area, a small percentage of the aluminum is sent out-of-house for plating or is immediately sent to packaging for shipping to customers. All fabricated aluminum, except product sent to cadmium plating, is moved to the Iridite Area. A smaller percentage is sent to the spray booths for painting after the iridite process is completed.

Iridite Area. In the Iridite Area, the aluminum components are cleaned and a chrome coating is applied to the surface. Seven above-ground tanks, each with a capacity of approximately 2,300 gallons, are situated in series surrounded by a 2-foot high concrete block berm. An eighth tank with a much smaller capacity, 450 gallons, is located on the northern most side of the row of tanks (Figure 3, Photographs 16 to 21). Each tank has a unique chemistry. There is no flow between tanks. Only small amounts of residual liquid that may remain on the components as they are passed from tank to tank are transferred from tank to tank. An overhead conveyor system holds the components and moves them from tank to tank.

The southern most tank, Tank 1, is the cleaning tank; it contains 6 percent to 8 percent A-126 cleaner and 92 to 94 percent tap water by volume (Photograph 16). Components are dipped into this tank for 3 to 5 minutes to clean off the cutting oils and small amounts of grime that have accumulated on the aluminum. Tank 1 is maintained at approximately 150° Fahrenheit (F). The level of liquid in this tank remains relatively constant. No major discharges to the clarifier or the sanitary sewer system are made from this tank. Generally, the only loss of liquid from this tank is from small amounts of liquid that drip from the components as they are passed from Tank 1 to Tank 2. Every few years this tank is drained and cleaned and its contents are removed and manifested off site.

The second tank, Tank 2, is the rinse tank (Photograph 17). Non-contact cooling water from the plastics area is transported via overhead pipelines to the Iridite Area where it is used to rinse off the products that have just been cleaned in Tank 1. Tank 2 has a continuous overflow to the sewer via the clarifier on the east side of the building. From Tank 2 the components are placed in Tank 3, the caustic soda tank.

Tank 3 contains 6 to 8 percent Aluminum Etch #22 (sodium hydroxide) and 92 to 94 percent tap water by volume (Photograph 18). The components are kept in Tank 3 for approximately 3 to 5 minutes. This bath opens the "skin" of the aluminum and allows the chrome to penetrate the surface. There is no outlet to Tank 3. The liquid level in Tank 3 remains relatively constant. Small amounts of liquid that are lost from the tanks when components are transferred back to Tank 2 are replenished with tap water. No major losses of liquid solution occur from this tank. Every several years this tank is drained and the contents are removed by a licensed waste hauler. From Tank 3 the components are brought over to Tank 2 again and rinsed with the non-contact cooling water from the plastics area.

After this rinsing, the components are suspended in Tank 4, the deoxidation tank, for 3 to 5 minutes (Photograph 19). This tank contains 20 percent by volume Deoxidizer NC and 80 percent tap water at room temperature. No liquid is discharged on a regular basis from Tank 4. Tank 4 has a continuous filtering system that eliminates the need for emptying and disposing its liquid contents. From Tank 4 the components are placed in Tank 2, where they are rinsed. Constant rinse water overflow is being discharged from Tank 2 to the sewer system via the clarifier.

Once the components have been rinsed they are placed in Tank 6, the chrome tank (Photograph 20). This tank contains 1 percent chromate, Chromium CC 1150, and 99 percent tap water by volume. This tank is maintained at 90°F with a pH of 2.0. No liquids are discharged from this tank. It has a continuous filtering system that eliminates the need for emptying and disposing of the liquid contents. A chemical conversion film (chromate) is applied in this tank.

From the Chrome tank the components are spray rinsed in Tank 5 with non-contact cooling water from the plastics manufacturing process (Photograph 21). The rinse water from Tank 5 passes through a Simpson Filtration filter press where the majority of the metals are precipitated out into filter cake (Photograph 22). The filter cake generated is then stored in 55-gallon drums for less than 90 days in the Hazardous Waste Storage Area (Photograph 15). The filter cake is removed and disposed off-site by a licensed waste hauler. The residual liquid, approximately 500 gallons, is discharged nightly to the sewer system via the clarifier.

After the components are spray rinsed they are moved to Tank 7, where they are rinsed with hot water. The water in Tank 7 is heated by a gas fired 1-million BTU furnace. Rinsing the components with hot water accelerates drying of the corrosion-proof coating. Rinse-water overflow from Tank 7 is continuously discharged to the sewer via the clarifier.

The final tank, Tank 8, has a much smaller capacity of 450 gallons (Photograph 20). This tank contains 10 percent polyvinyl alcohol-based coating and 90 percent tap water. After the components are completely dry they are assembled, packaged, and shipped to customers.

The chemicals used in the Iridite Area, Cleaner A-126, Aluminum Etch #22, Deoxidizer N/C and Chromium CC1150 are stored in small quantities in the north corner of the Iridite Area (Figure 3, Photograph 23). Larger quantities are stored in the storage shed in the Hazardous Waste Storage Area (Figure 3, Photograph 24). As needed, quantities of chemicals needed in the iridite process are moved from the storage shed to the iridite process area.

Less than 8,000 gallons of waste water is discharged to the sewer system via the clarifier per day. The facility maintains a waste-water discharge permit No. 381321 for the disposal of this process water. Other than this waste water, very little waste is generated in the iridite process. When the tanks need to be periodically cleaned, their contents are manifested and disposed by a license hauler (Table 2).

On the day of the inspection, standing water was noted in the bermed Iridite Area (Photograph 25). This reportedly was not a normal occurrence. An overflow had occurred that caused process water to collect in the bermed area. Staining of a white and yellow residue was noted in the bermed area suggesting that process water had previously flowed into the bermed area and then evaporated. Additionally, a white precipitate was observed in-between the tanks (Photograph 26). The cause of this is unknown.

Steel Process. The initial steps of the steel process are similar to those of the aluminum process. Harris Dracon, however, uses only 10 percent steel. The major differences between the aluminum process and the steel process is that the steel is wiped down with 1,1,1-trichloroethane (TCA), and does not go through the iridite process. The steel is usually sent out for cadmium plating, or painted in the spray booths at Harris Dracon.

To avoid corrosion by rust prior to, during, and after shipment, the metal is received at Harris Dracon with a thin coating of oil on it. After bulk cutting at Harris Dracon, the steel is wiped down with TCA. This removes the small amounts of protective oil the metal had on it when it arrived and 470 Doall applied during cutting operations. A 5-gallon bucket of TCA is kept near the Sawing and Deburring Area. This bucket is filled from the 250-gallon above-ground TCA storage tank kept in the Hazardous Waste Storage Area (Photograph 27). The 5-gallon bucket of TCA is periodically transported from the sawing and deburring area to the parking lot on the west side of the building outside where the metal is wiped down (Photograph 28). The TCA is applied to the metal with pieces of cloth that are partially saturated with TCA.

Spent TCA is collected and stored for less than 90 days in 55-gallon drums in the Hazardous Waste Storage Area on the north side of the building. According to site personnel, this process will soon be discontinued for the most part when a new vapor degreaser (permit No. D33283) is brought on line (Photograph 29). It is anticipated that some of the larger pieces of metal will not fit in the degreaser and will still have to be manually wiped down.

Following the wipe down operation, the products are moved to the Welding Area. The welding is primarily of the argon gas type. Cylinders of argon gas are stored, chained, and kept upright in the welding area (Photograph 30).

After the steel is fabricated in a manner similar to that of the aluminum, it is again wiped down with TCA. Most of it is painted in spray booths (permits No. M31409, No. M31410) and sent through the oven (permit M31411) for drying, (Photographs 31 to 33). After drying, the steel products are assembled, packaged, and shipped. The water-soluble paint used in the spray booths is stored in 55-gallon drums in the warehousing area on the south side of the building (Figure 3). Empty 55-gallon drums are placed in the Hazardous Waste Storage Area on the northern exterior of the building, where they await pickup and recycling by the paint distributors. Spent spray booth filters are disposed in the dumpster and removed with the other solid waste. After drying, the steel products are assembled, packaged, and shipped to customers.

<u>Plastic Injection Molding Process</u>. The plastic injection molding processing is conducted on the south side of the facility (Figure 3, Photograph 34). This operation is distinct from the metal processes. The only link between them is the use of part of the non-contact cooling water from the plastic extrusion area in the rinse tanks in the iridite process.

The plastic process has seven injection molding machines. Pelletized polyvinyl chloride (PVC), acrylonitrice-butadiene-styrene (ABS), polycarbonate, or various other plastic compounds are poured into hoppers on the injection molding machines where it is dried. The hoppers feed the material into the barrel where it is also heated, generally to a temperature of 425°F. From the barrel the plastic flows into the mold where it hardens. The hardening process is accelerated by quenching the molds with non-contact cooling water. This water is stored in a cooling tower on the roof of the building. After the water has been used to cool the molds, some of it is returned to the cooling tower, and the remaining water is piped via overhead lines to the Iridite Area where it is used to rinse metal components.

When the plastic components are cooled they are removed from the molds. In most cases, further assembly is required, such as the gluing of other parts. Once the plastic products are assembled to customer specification, they are packaged and shipped.

Scrap plastic generated in this process is reground and mixed with virgin product.

Minimal amounts of plastic waste are generated in the plastic injection molding process.

The injection mold machines are run by pumps that use DTE #25 Mobil hydraulic oil. These units are self-contained in each machine. Small amounts of oil are added only as needed. The machines are rarely drained of hydraulic oil (less than once a year). Any major maintenance of this type is conducted by an outside contractor who handles waste disposal.

The molds used in the injection mold machines are cleaned with MC-16, an acetone-based solvent. Antifreeze stored in two 55-gallon drums in the mold area is used for chiller and self-contained mold heaters.

HAZARDOUS MATERIALS STORAGE AREAS

Hazardous materials are stored in several areas within the building, as well as on the northern exterior of the building in a fenced, locked, and bermed enclosure (Photograph 15). The berm was constructed in 1984 after the facility received a citation from the Department of Health Services (DHS). The facility leases a 250-gallon above-ground steel tank for the storage of TCA (Photograph 27). This tank is kept outside on the north side of the building in the fenced and locked storage area (Photograph 15). Empty 55-gallon drums of water-soluble 360, 390, and 470 Doall and empty 55-gallon empty paint drums are also stored in this area, as are 55-gallon drums of waste oil produced in the metal fabrication process. The spray booth operation adjacent to this open air storage area is an enclosed locking shed. Miscellaneous quantities of water-soluble paint are kept in this shed along with caustic soda and nitric acid (Figure 3, Photograph 24).

Relatively smaller amounts of the chemicals used in the iridite process are stored near the dip tanks in the Iridite Area. Nitric acid, caustic soda, deoxidizer, ammonium biflorite, A-126 cleaner, and oakite-dispose aid are stored in this area (Figure 3, Photograph 23). Minor chemical spills were noted on the concrete floor in this area.

Fifty-five gallon drums of water soluble oil, Doall cutting oil, and 5-gallon buckets of TCA are stored in the metal fabrication area on the north-central portion of the building (Figure 3, Photograph 14).

Compressed gas cylinders of argon, helium, carbon dioxide, acetylene, oxygen, and propane are stored in the welding area on the western side of the building (Figure 3, Photograph 30). These cylinders are supplied by outside contractors who deliver full cylinders and remove empty ones for off-site filling.

Fifty-five gallon drums and 5-gallon buckets of paint used in the spray booth are stored in the warehousing area near the plastics manufacturing area on the south side of the building (Figure 3, Photograph 35). Fifty-five gallon drums of Shellzone All Season Anti-freeze are stored in the southeast corner of the building in the plastics manufacturing area (Figure 3, Photograph 36). There was no evidence of spillage or staining in the area. Housekeeping in and around the plastics areas was good with no evidence of misuse of hazardous substances.

HAZARDOUS WASTE STORAGE AREA

All hazardous waste is stored in a locked, fenced, and bermed area on the northern exterior of the building (Figure 3, Photograph 15). The area was clearly placarded as a Hazardous Waste Storage Area. The drums were separated by the types of wastes stored in each drum. Filter cake sludge, waste oil, cutting oil, TCA, and empty paint drums awaiting pickup for recycling are stored in the Hazardous Waste Storage Area. All drums containing wastes in this area were labeled with hazardous waste labels identifying the contents of the drums.

Those that were observed had not been stored for greater than 90 days, although the determination of the adequacy or completeness of the labelling was not a part of this scope of work.

A Safety-Kleen sink is located in the maintenance area for degreasing and disposal of small amounts of oils and solvents (Photograph 37). This sink is serviced by Safety-Kleen who removes and disposes all of the hazardous waste that collects in the sink.

PERMITS

Mr. John Bird, Materials Manager, provided Geraghty & Miller with copies of the permits Harris Dracon has secured for its operation on Mason Avenue (Table 3 and Appendix B). The facility maintains two permits, No. M31409 and No. M31410, for its spray booths; one permit, No. M31411, for its coating and baking equipment; and one permit for its degreaser No. D33283. All four of these permits are administered by the South Coast Air Quality Management District (SCAQMD) and all are current.

Harris Dracon has two current permits for its air compressor equipment issued by the State of California Department of Industrial Relations. Harris Dracon did not have a permit in its files for a third small compressor it operates at the site. Harris Dracon is attempting to locate this permit through the insurance company that inspects the Harris Dracon files. If Royal Insurance does not have a copy on file it will reinspect the Harris Dracon compressor to obtain a permit.

Harris Dracon discharges less than 8,000 gallon of process waste water to the City of Los Angeles sewer system under permit No. 381321. This permit, issued and administered by the City of Los Angeles Department of Public Works, Industrial Waste Control, is current.

REGULATORY REVIEW

A review of applicable regulatory programs was conducted at the local, state, and federal levels. This entailed checking facility listings available through the city fire department, the county health department, the state Department of Health Services (DHS) and the Regional Water Quality Control Boards (RWQCB), the federal United States Environmental Protection Agency Region IX (EPA), and a visit to the DHS Region III office in Burbank, California.

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA)

The Comprehensive Environmental Response Compensation and Liability Act (CERCLA), commonly know as Superfund, was signed into law in 1980. As part of the legislation, the EPA maintains a list of potentially hazardous waste sites, called CERCLIS. Once sites have been designated on the CERCLIS list, the EPA ranks the sites to determine potential risks to human health and the environment. Only those sites that pose the greatest risk are added to the National Priority List (NPL). Only sites on the NPL can receive CERCLA funding.

The NPL list was reviewed for any NPL sites in close proximity to the subject site. The closest site on the NPL is the San Fernando ground-water basin located approximately 9 miles to the southeast of the site.

The CERCLIS list of potentially hazardous waste sites was also reviewed for any facilities in close proximity to the site. Dracon Industries at 9541 Mason Avenue was listed on the CERCLIS List (Appendix C).

Ms. Ida Tolliver of the EPA Region IX was contacted to determine why Dracon Industries was listed on the CERCLIS. She was unable to explain why the facility was listed. She suggested that the EPA had either been to the facility and determined that further investigation was warranted or that a citizen requested that the facility be placed on the list and

investigated. Dracon Industries is listed by address and EPA identification number only. There was no record of preliminary site inspections or status of the case under the Dracon Industries listing. This is rather unusual for the CERCLIS Listing.

Geraghty & Miller has made a Freedom of Information Act (FOIA) request to the EPA to receive all EPA files pertaining to Dracon Industries (Appendix D). As of January 26, 1991, Geraghty & Miller has not yet received a response from the EPA.

In addition to Dracon Industries, several other facilities in Chatsworth were listed on the CERCLIS. Five of ten were also listed only by address and EPA identification number. This suggests that all these sites were placed on the CERCLIS by the same mechanism and perhaps for the same reasons such as a citizen's request for further information about these sites.

HAZARDOUS WASTE AND/OR SUBSTANCE SITES LIST (CORTESE)

Pursuant to California Government Code Section 65962.5, the California Governor's Office of Planning and Research compiles a list of hazardous waste and substance sites. This list is commonly called the Cortese List. The DHS, the State Water Resources Control Board and the California Waste Management Board supply the information to the Governor's office that makes this list. Harris Dracon was not listed on the Cortese list. The Cortese list contained six sites within a 1-mile radius. Three of these sites are located within a 1/2-mile radius of the site. Most of these appear on the RWQCB list of leaking underground storage tanks. None of these sites are located on adjacent properties (Appendix E). It is unlikely that contamination from nearby Cortese list sites has impacted Harris Dracon.

ABANDONED SITES PROGRAM INFORMATION SYSTEM (ASPIS)

The Abandoned Sites Program Information System list (ASPIS) was developed under Section 253596 of the California Health and Safety Code. In the early 1980s, the program identified potential hazardous substance/waste sites through the use of Standard Industrial

Classification (SIC) codes, phone book reviews, site drivebys, citizen complaints, and other leads. The information on the ASPIS list is preliminary, and most sites listed are potentially hazardous waste sites that require further investigatory work to substantiate the possibility of contamination. Harris Dracon was not listed on the ASPIS list. Ten ASPIS sites are located within one mile of Harris Dracon. Only one site, Imperial Tool Company located at 20551 Plummer Street, is located within close proximity of Harris Dracon. The status of the site is unresolved; the likelihood that contamination from this site could impact Harris Dracon cannot be accurately assessed at this time until further investigation of the Imperial Tool Company is conducted. However, the southeasterly regional ground-water flow suggests that contamination at Imperial Tool would probably not affect the Harris Dracon site.

BOND EXPENDITURE PLAN

The California Health and Safety Code Section 25334.5, as amended by AB 129 (Chapter 1439, Statutes of 1985), requires the DHS to develop an expenditure plan for the appropriation of Hazardous Substance Cleanup Bond Act funds. The Bond Expenditure Plan identifies California hazardous waste sites targeted for cleanup by responsible parties (Rps), the DHS, and the EPA. The Bond Expenditure Plan also outlines the DHS policies, priorities, process, and resources related to the site cleanup (DHS 1989). The Bond Expenditure Plan was reviewed for facilities within close proximity to the site. The San Fernando ground-water basin located approximately 9 miles southeast of the site was identified as the closest site; however, its location southeast of the facility, down-gradient of the prominent ground-water flow direction, should not impact the Harris Dracon site.

LEAKING UNDERGROUND STORAGE TANKS (LUSTs)

The RWQCB list of leaking underground storage tanks (LUST) was reviewed for nearby LUSTs. Four LUST sites are located within a 1/2-mile radius of the Harris Dracon Division site. Three additional LUST sites are located within a 1-mile radius of the site (Appendix G).

None of these sites are on property immediately adjacent to Harris Dracon and therefore present only a very small likelihood of impacting Harris Dracon.

PROPOSITION 65

The Safe Drinking Water and Toxic Enforcement Act of 1986, commonly known as Proposition 65, was passed by California voters in November 1986. This statute requires businesses to give clear and reasonable warnings to individuals upon anticipated exposure to certain listed chemicals. Warnings can include warning signs at businesses using the listed chemicals. Proposition 65 warning signs were observed at Harris Dracon. Proposition 65 also prohibits individuals or businesses from "knowingly discharging or releasing chemicals known to the state to cause cancer or reproductive toxicity into water or onto or into land where such chemical passes or probably will pass into any source of drinking water" (H&SC 1988). Reportedly no spills or leaks have occurred at the Harris Dracon site.

COMMUNITY RIGHT-TO-KNOW

In 1986, the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) was amended by the Superfund Amendment of 1986 (SARA). The federal Emergency Planning and Community Right-to-Know Act requirements (Title III of SARA) created, for the first time, a comprehensive federal program for the identification and reporting of industrial chemical usage. Under this program, industry is required to make available to the public information on the identity, location, and quantity of chemicals used, as well as information on the size and nature of chemical spills.

In California, many of these requirements overlap with independent requirements of the state-mandated Waters Bill (AB 2189) and La Follette Bill (AB 3777). These state laws predated SARA Title III and were adopted for similar reasons. After two years of negotiation with the EPA, the California legislature amended the state requirements in 1988 to reduce inconsistencies between state and federal requirements (Ensco, 1988). For example, the

California Legislature has adopted laws declaring if state-required inventory forms are filed with an Administering Agency (AA), it shall be deemed to have filed the inventory form required by 42 U.S.C. 11022(a) with the state Emergency Response Commission and the Emergency Planning Committee established under SARA Title III. Additionally, any business that must submit an inventory under SARA Title III is required to submit a business plan to its local AA. In the State of California, businesses that have submitted an approved business plan to its AA have fulfilled SARA Title III reporting requirements (Pers comm. Abdullah, 1990 and Cooper 1990).

Waters Bill: Hazardous Materials Storage and Emergency Response Plans and Inventory Law (AB 2185, et al)

The Waters Bill requires that local governments regulate the storage of hazardous materials and plan for emergency response. To this end, business plans are required to be submitted annually to the local AA by businesses handling hazardous materials over the state threshold quantities of 55 gallons of any regulated liquid, 200 feet of compressed gas (at standard temperature and pressure), or 500 pounds of solid. Business plans must include an inventory of all hazardous materials handled in excess of threshold amounts, emergency plans to respond to a release or threatened release of a hazardous material and a procedure for the immediate reporting of such a release, evacuation procedures for the site, and training for all employees.

La Follette Bill: Acutely Hazardous Materials Risk Management (AB 3777, et al)

The La Follette Bill was enacted to expand control over extremely hazardous materials that can produce toxic clouds after fires, explosions, or accidents. In addition, it expands the state wide hazardous materials inventory and emergency response programs mandated by the Waters Bill (Ensco, 1988).

Tanner Amendment (AB 924)

This amendment to the Waters Bills requires that any business regulated by the Waters Bill that rents or leases its location must notify the property owner of the Waters Bill requirements. Furthermore, if requested by the owner, the renter/lessee must provide the owner with a copy of the business plan within 5 days.

The City of Los Angeles Fire Department is the AA for the incorporated portions of Chatsworth where Harris Dracon is located. When the City of Los Angeles Fire Department was contacted by Geraghty & Miller, Inspector Samson reported that Harris Dracon had submitted a business plan. Harris Dracon provided Geraghty & Miller with a copy of its most recent business plan (Appendix H). Submittal of this business plan to the Los Angeles Fire Department fulfills the Waters Bill requirements for the submittal of hazardous substance inventories, emergency response plans, prevention plans, and employee training programs as well as all SARA Title III reporting requirements. In addition to the business plan, Harris Dracon has prepared a separate document that outlines an emergency evacuation plan and the corporate hazardous materials training program.

CALIFORNIA HAZARDOUS WASTE CONTROL LAW (HWCL)

The Hazardous Waste Control Law (HWCL), enacted in 1972, predates the federal Resource Conservation and Recovery Act (RCRA), passed in 1976. Like RCRA, the HWCL has since been modified and supplemented by legislation, to provide "cradle to grave" regulation of hazardous wastes. The federal program, RCRA, implemented by the EPA, incorporates original HWCL provisions as well as subsequent HWCL amendments (Ensco, 1988). For the most part, the California HWCL is broader in scope than the federal hazardous waste regulations and takes precedence over federal regulations.

HWCL/RCRA Interface

The EPA has contracted with the California DHS to enforce the RCRA permitting and surveillance enforcement portions of the federal hazardous waste regulations. The DHS has in turn entered into a Memoranda of Understanding (MOU) with many local and county health departments to enforce the hazardous waste generator inspection programs. The DHS has entered into a MOU with Los Angeles County, which allows the Los Angeles County Department of Health to oversee the generator inspection program. Typically, the generator inspection program polices the use of manifests for the disposal of hazardous waste, the classification of hazardous wastes, the 90-day storage maximum for the storage of hazardous waste by generators, establishment of Contingency Plans, and similar hazardous waste generator requirements (personal communication Horner, 1990).

Harris Dracon has a valid Public Health License from Los Angeles County as required by County Public Health Ordinance No. 8609 and a valid Certificate of Disclosure of Hazardous Substances from the City of Los Angeles as specified in the Los Angeles City Ordinance Division 8 of the Los Angeles Fire Code. Harris Dracon has also obtained an EPA identification number, CAD 008508475, that it uses on all hazardous waste manifests as specified by RCRA and HWCL.

Harris Dracon files did not contain biennial hazardous waste generator reports. These reports are required by the California Code of Regulations, Title 22, Section 66493. Biennial Reports are to be submitted to the Department of Health Services by March 1 of each even numbered year. The Biennial Report shall be submitted on Department forms and shall cover generator activities during the previous calendar year. Specific information is required, such as EPA identification number and name and address for each off-site treatment, storage, or disposal facility to which waste was shipped as outlined in Title 22.

HAZARDOUS WASTE TAXES AND GENERATOR FEES

California Senate Bill (SB) 618, signed into law on September 24, 1981, created a Hazardous Substance Account within the General Fund to fund state response actions. Hazardous waste generators (defined in California as those generating over 100 kilograms per month) are required to pay a yearly hazardous waste generation tax. The tax is levied against all persons submitting hazardous waste for disposal during the calendar year. Each person in that category also must file an annual report with the DHS before March of each year, specifying the amount of hazardous waste by type that was disposed. Based on the report, the generator is taxed according to the amount of hazardous waste disposed.

The Harris Dracon files contain records of its Hazardous Waste Disposal Reports - Annual "Superfund" Tax reporting forms for calendar years 1981 through 1989, Hazardous Waste Tax Return for the period July 1985 through June 1990, and Notices of Annual Generator Operating Fees for fiscal years 1987, calendar year 1988, and calendar year 1989 (Appendix K). Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588).

The Air Toxics "Hot Spots Information and Assessment Act" of 1987 (AB 2588) defined a broad list of air contaminants, including:

- 1. Asbestos:
- 2. Benzene:
- 3. Cadmium Sulfide;
- 4. Dioxins;
- 5. Ethylene Dibromide;
- 6. Ethylene Dichloride;
- 7. Hexavalent Chromium.

Also included are carcinogens and reproductive toxins listed under Proposition 65, as well as other air toxic and potential air toxics listed on other state and federal lists (Ensco, 1988).

Reporting requirements are phased-in based upon tons of annual emissions of traditional pollutants. As of July 1, 1988, AB 2588 applied to facilities releasing 25 tons or more per year of total organic gases, particulates, or oxides or nitrogen or sulfur. The facility must then determine which of the numerous listed chemicals are components of these pollutants and quantify them. In July 1990, the Air Resources Board was required to report to the Legislature to recommend which facilities that generate less than 10 tons per year should be regulated by AB 2588 (Enseco 1988).

Each facility regulated by AB 2588 is required to submit to the AQMD a proposed Comprehensive Emissions Inventory Plan. Those facilities generating between 10 and 25 tons per year had to submit their plans by August 1, 1990.

There is no record of Harris Dracon having quantified its air emissions or having submitted a Comprehensive Emissions Inventory Plan to the AQMD in the Harris Dracon files.

DEPARTMENT OF HEALTH SERVICES (DHS) REGION III FILE REVIEW

Geraghty & Miller personnel visited the DHS Region III offices in Burbank, California to review its four regulatory files for the Harris Dracon facility in Chatsworth, California. The majority of the files' contents pertained to Harris Dracon's hazardous waste facility permit requirements.

Dracon Industries was granted Interim Status to operate as a permitted hazardous waste facility on December 30, 1981. The facility personnel then improperly filed for a Part A Hazardous Waste Permit. By receiving a Part A Permit, Dracon Industries became incorrectly classified as a Treatment, Storage, and Disposal (TSD) facility. This classification subjected Dracon Industries/Harris Dracon to a myriad of inspection and reporting requirements. Beginning as early as 1983, Harris began actions to attain the proper classification as a hazardous waste generator only, since it never treated or disposed of hazardous waste on the site. On September 8, 1987, after several years of petitioning the EPA and the DHS, Harris

Dracon was finally granted a variance from hazardous waste facility permit requirements. Supporting correspondence and inspection reports from the DHS Region III files that document the variance requesting process are provided in Appendix L.

As a result of Dracon Industries/Harris Dracon's status as a TSD facility and its request for a variance from this status, several site inspections were conducted by representatives of the DHS. During these inspections minor violations were noted in the Dracon Industries/Harris Dracon waste handling practices (Appendix L). As each of these violations was noted, immediate corrective actions were taken by Dracon Industries/Harris Dracon. None of the notices of violation resulted in fines or other penalties.

PERMIT COMPLIANCE REVIEW

The following section addresses each of the permits that Harris Dracon has secured for its operation. Facility records of sampling or other quantitative records have been reviewed to determine if permit conditions have been met. The short time frame over which this assessment has been conducted necessitated the reliance on Harris Dracon facility records. The validity of this review is therefore dependent on the completeness of the Harris Dracon facility files.

Wastewater Permit No. 381321

Permit No. 381321 was issued to Harris Dracon by the City of Los Angeles, Department of Public Works, Bureau of Sanitation for the discharge of iridite process wastewater to the City of Los Angeles sanitary sewer system. This permit requires the semi-annual reporting of a 24-hour composite sample of the facility's wastewater collected and analyzed by a state or city approved laboratory. The Los Angeles district office requires notice 48 hours prior to the sampling. All information must be submitted on EPA Semi-Annual Compliance Report Forms for operations that discharge less than 10,000 gallons per day (gpd). Further, the permit stipulates that if discharge standards are exceeded, a statement for the reason of non-compliance must be attached to the report along with an explanation of the corrective measures taken with

a schedule of steps to meet future compliance. Finally, the wastewater must be resampled and a new compliance report submitted to demonstrate compliance has been achieved.

Harris Dracon files pertaining to the wastewater discharge begin in 1985 when Harris Dracon received a letter from Mr. Delvin Biagi, Director of the City of Los Angeles Department of Public Works (LADPW), Bureau of Sanitation. This letter informed Harris Dracon that its EPA Periodic Compliance Report for the period June 1984 to December 1984 was past due (Appendix M). Analytical results reported on February 8, 1985, for samples collected on January 24, 1985 are all below the permit limits.

Similarly, Harris Dracon received notification from the LADPW that its Semi-Annual EPA Wastewater compliance report for the period January 1985 to June 30, 1985 was past due. Results of the analytical samples collected on June 12, 1985 were all within permit limits and were submitted by Harris Dracon to the City of Los Angeles by July 15,1985.

On January 23, 1986 Harris Dracon was served with a notice of violation, No. 41724, for failure to submit its periodic compliance report by mid-January (Appendix M). A sample collected on January 27, 1986 was submitted to the City of Los Angeles by Harris Dracon in early February 1986. Analytical results confirmed that Harris Dracon was within permit terms for the second half of 1985.

On June 27, 1986 Harris Dracon was informed by the City of Los Angeles that the allowable limits for certain parameters had become more stringent and that based on Harris Dracon's discharge of less than 10,000 gpd it would be required to submit compliance Form D (Appendix M). The semi-annual sampling conducted under the more stringent limits showed violations for the levels of copper, total chromium, and zinc in the wastewater that Harris Dracon was discharging into the City sewer system. The letter attached to the report by Harris Dracon stated that the neutralizing agent had not fully neutralized the wastewater before it was discharged. The City of Los Angeles responded to these exceedences by requesting that

resampling be conducted and the results submitted no later than September 8, 1986 to demonstrate that the problem had been corrected.

Samples collected for Harris Dracon on July 29, 1986 found the levels for total chromium, copper, and zinc still out of compliance. After the second sample taken on July 29, 1986 was out of compliance, Harris Dracon changed suppliers for chemicals used in the process tanks, and contracted with Disposal Control Services to pump out and dispose of the contents of the tank. These actions were conducted to "clear up any contamination" (Appendix M). Neither additional follow-up sample results nor additional requests for sampling by the City of Los Angeles were contained in the Harris Dracon files.

On September 2, 1986 Harris Dracon received a Notice of Violation No. 41745 from the City of Los Angeles Bureau of Sanitation for having a discharge with a pH of 4.4. On October 7, 1986 Harris Dracon responded to the citation by explaining this was an isolated case where an unauthorized individual drained a rinse tank without properly treating the water (Appendix M).

Elevated pH was again noted as a violation received by Harris Dracon on December 3, 1986. A letter to the City on January 19, 1987 claimed pH was monitored and treated prior to its release to the sewer system. No followup correspondence from the City address Harris Dracon's response was contained in the files (Appendix M).

The sample collected on December 19, 1986 for the reporting period July through December 1986 and the sample collected May 29, 1987 for the period January 1987 through June 1987 were in compliance for all parameters.

Harris Dracon exceeded the allowable limit for zinc for the report period July through December 1987. Resampling conducted on February 22, 1988 contained levels of zinc below those allowed by the permit (Appendix M).

The sample collected on June 1, 1988 for the reporting period January through June 1988 was in compliance with the permit terms.

The data originally submitted by Harris Dracon for the period July 1988 through December 1988 showed that permit terms were exceeded for free cyanide and total cyanide. A letter from the City of Los Angeles dated February 1, 1989 requested that the problem be corrected and additional sample results demonstrating that Harris Dracon was no longer out of compliance with its permit terms be submitted by February 16, 1989. On March 13, 1989 EMCON Associates submitted a report to the City of Los Angeles on behalf of Harris Dracon. Upon EMCON Associates recommendation, Harris Dracon requested that Brown and Caldwell Laboratories reanalyze the original sample for the parameters that exceeded the permit limits. Additionally, EMCON suggested that Harris Dracon submit the split sample, collected by Harris Dracon employees, for analysis by another laboratory.

The reanalysis of the sample by Brown and Caldwell resulted in the decrease in the amount of free cyanide detected and consequently compliance with the permit terms for free cyanide. The reanalysis for total cyanide by Brown and Caldwell was higher than the original analysis and thus by this analysis Harris Dracon was still out of compliance with permit terms. The analysis of the split sample by Burmah Technical Services, Inc. showed a cyanide level of .29 mg/l, well within the permit terms.

No follow-up correspondence from the City of Los Angeles was found in the Harris Dracon files. Presumably, the City of Los Angeles accepted the results from Burmah Technical Services, Inc. and the reanalysis by Brown and Caldwell.

Harris Dracon was in compliance for its Semi-Annual Compliance Report for January through June 1990. This sample was the last analysis contained in the Harris Dracon files.

On October 6, 1990 the City of Los Angeles informed Harris Dracon that in July 1990 the EPA issued an Administrative Order and a Notice of Violation to the City of Los Angeles

for its failure to adequately implement and enforce all pretreatment program requirements. As a result, the frequency of self monitoring will increase from twice a year to six times a year. Under this new scheme, Harris Dracon is required to have filed a report on November 15, 1990 and every other month on the 15th of the month (Appendix M). Reportedly, the sample for the November 15th report has been collected, but no results were available on the day Geraghty & Miller inspected the site.

Spray Booth Permit No. M31409

Spray booth permit No. M31409 was issued to Harris Dracon by the South Coast Air Quality Management District (SCAQMD) for the operation of a floor-type spray booth that measures 10-feet wide by 10-feet long by 10-feet high with thirty-six 20-inch by 20-inch exhaust filters and one horsepower (H. P.) exhaust fan.

The spray booth must be operated in accordance with the following permit conditions. The spray booth must only be operated if all exhaust air passes through filter media at least 2 inches thick, a gauge must be installed to indicate, in inches of water, the static pressure differential across the exhaust filters, and in operation the pressure differential must not exceed 0.25 inches of water. Organic solvents and/or coatings containing organic solvents used in the spray booth must be clearly labeled as non-photochemically reactive by the supplier, or for bulk shipments, shown to be non-photochemically reactive on bills of lading or invoices, and the total quantity of coatings and solvents used in the spray booth must not exceed 6 gpd (Appendix B).

In-house coatings and solvent inventory records kept for this spray booth show that daily usage of coatings or solvents have not exceeded 6 gallons per day in accordance with the permit terms and conditions (Appendix N).

Facility files contained a notice of violation dated May 8, 1985 of SCAQMD District Rule 1107(b) (5) (c) (Appendix N). Harris Dracon was cited for not meeting the VOC content limits for coating applied to metal parts as set out in District Rule 1107(b) (5) (c). Harris

Dracon petitioned the board for a variance to the rule and appeared before the South Coast Air Quality Management District Board. Primarily because Harris Dracon was able to show that it was making an effort to comply with the rule, a variance was granted by the Board. All necessary fees were paid by Harris Dracon.

A Notice of Violation No. L-00903 was filed against Harris Dracon by the SCAQMD on May 5, 1989, for "using a conventional gun with transfer efficiency approximately 25 percent" (Appendix N). Mr. Diaz reported that this violation resulted from an inadequate explanation on the part of the Harris Dracon employee to the SCAQMD inspector. The matter was settled as a mutual agreement matter with Harris Dracon paying a \$700.00 fine (Appendix N).

Mr. Diaz recalled another instance when the SCAQMD inspected the facility and had found that the paint filters had exceeded their SCAQMD permit prescribed limits. The filters were changed and there was no further action taken by the SCAQMD against Harris Dracon. No correspondence or notices of violation were found in the facility files that correspond to this incident.

Spray Booth Permit No. M31410

This permit was issued to Harris Dracon by the SCAQMD for the operation of a floor-type, conveyorized spray booth that measures 10 feet wide by 10 feet long by 10 feet high with thirty-six 20-inch by 20-inch exhaust filters and one 5 H. P. exhaust fan. The operating conditions were the same as those listed for the spray booth above except the maximum total quantity of coatings and solvents used in this spray booth must not exceed 1 gpd.

In-house inventory records for this spray booth show that the permit terms of one gallon of coatings or solvents have been adhered to by Harris Dracon. It is not known if these in-house records have been submitted to the SCAQMD. The facility files had no record of having submitted these to the SCAQMD.

Oven Permit No. M31411

Oven permit No. M31411 was issued to Harris Dracon by the SCAQMD for the operation of a P & H Conveyor Company conveyorized, direct-gas-fired oven that measures 6 feet wide by 15 feet long by 20 feet high with a BTU capacity of 1,200,000 per hour, one 1/3 H. P. combustion blower, one 10 H. P. circulating blower, and one 3/4 H. P. exhaust blower. Finally, this oven must not be operated at temperatures above 400°F.

Degreaser Permit No. D33283

Harris Dracon applied for and was granted a permit by the SCAQMD to operate a Tooltronics Vapor Degreaser Model No. 1818 that measures 1 foot 5 inches wide by 1 foot 4 inches long by 3 feet 10 inches high, with a 1/15 H. P. spray pump and 1/3 H. P. refrigerated condensers. The conditions for the operation of the vapor degreaser is outlined in the permit provided in Appendix B. The vapor degreaser has not yet been brought on line, but Harris Dracon plans to do so soon.

Permits to Operate Air Pressure Tanks No. 725918 and 57116

Harris Dracon has had two of its air pressure tanks inspected by Mr. R. Murphy of the Royal Insurance Company and have kept the permits up-to-date in compliance with the California Department of Industrial Relations, Division of Occupational Safety and Health. The Harris Dracon files did not contain a permit for a third smaller compressor used on the site. Harris Dracon has contacted the Royal Insurance to determine if Royal Insurance Company has a permit for this compressor in its file. If there is not a permit, Harris Dracon has made an appointment to have the compressor inspected as a first step in securing a permit for the compressor.

AREAS OF CONCERN

During the site inspection several areas of potential environmental concern were noted at Harris Dracon. Each area is described briefly below.

IRIDITE AREA

On the east side of the Iridite Area near the easternmost wall of the facility, iridite process water was noted in the bermed area (Photograph 25). In addition, process by-product was noted in between the tanks (Photograph 26). Since hazardous substances that are caustic in nature are stored and used in this area, there is the potential for these substances to have penetrated the concrete floor, particularly if there are cracks, fissures, expansion joints, or damaged concrete that may serve as conduits for the process water or process chemicals to reach the underling soil and possibly the ground water.

CLARIFIER

The clarifier located on the east side of the building has received process wastewater since operations began at the site in 1974. Although there are no reported problems with the clarifier, it was filled with water on the day of the site inspection and its integrity could not be assessed (Photograph 6 to 9). Further, its use as a conduit for wastewater to pass from the facility to the City of Los Angeles sewer system has caused this structure to be identified as an area of potential environmental concern.

HAZARDOUS WASTE STORAGE AREA

The constant storage of hazardous substances and wastes in the Hazardous Waste Storage Area causes this area to be listed as an area of potential environmental concern. If spills of hazardous waste were to have taken place it is likely that it would have occurred in this area.

LOADING DOCK SUMP

The sump in the loading dock is not used as a discharge point for the facility; however, its location and the pitch of the surrounding area toward this sump suggests that if hazardous substances or wastes were inadvertently discharged or spilled at the loading dock from vehicles at the loading dock, or from the rear of the facility, they would flow preferentially toward the sump in the loading area (Photographs 38 and 39). For these reasons the sump in the loading dock has been identified as an area of potential environmental concern.

COMPRESSOR/METAL DEGREASING (NORTHWEST SIDE OF THE EXTERIOR OF THE BUILDING)

The northwest side of the exterior of the building has been identified as an area of concern. This area is actually a composite of several distinct areas including the TCA wipedown area (Photograph 28), the damaged asphalt just to the west of the fenced compressor area (Photograph 40), the area west of the metal storage area where water collects (Photograph 41), and an oil stained area along the western wall of the building north of the compressor area (Photograph 42). In each of these areas the asphalt was either damaged or stained. They are also relatively close to a manhole where individuals not associated with Harris Dracon were seen by Harris Dracon personnel, disposing of some liquid material, which may have been hazardous in nature, down a manhole. For these reasons this area has been identified as an area of potential environmental concern.

FINDINGS

A summary of the observations and information acquired during the assessment of the site is presented below.

Operations at Harris Dracon involve the handling of chemical products that contain hazardous materials. For the most part, these products are handled in such a manner that the potential for contamination to occur on the site is minimal.

Employees responsible for the handling and removal of the hazardous wastes that accumulate on the site are aware that the drums must be carefully labeled, and removed with 90 days of the first day the waste begins to accumulate. The Hazardous Waste Storage Area was well maintained with no evidence of spillage within the area; however, photographs in the DHS files showed stains on the asphalt in and around the bermed area. The labeling and removal of the waste within 90 days must be strictly adhered to in order to avoid unnecessary penalties and fines.

Currently, Harris Dracon disposes of the absorbent from below the metal fabrication machines and its spent paint booth filters with the facility's other solid waste. Harris Dracon should confirm by sampling or other means that these wastes are not hazardous wastes. The responsibility for the classification of waste lies with the generator of the waste. Ensuring that all wastes disposed in the dumpsters are nonhazardous will avoid the inadvertent disposal of hazardous waste, by a non-licensed hauler to a non-licensed facility.

Harris Dracon has secured the necessary permit from the City of Los Angeles for the disclosure of hazardous substances and it has submitted a business plan to the City of Los Angeles to fulfill community-right-to-know requirements. The requisite license from the Los Angeles County Department of Public Health for the handling and generation of hazardous substances and wastes, and an EPA identification number for the generation of hazardous waste, have also been obtained by Harris Dracon.

Harris Dracon files did not contain any Biennial Reports, which are required for generators by the DHS. If Harris Dracon has filed these reports they should be incorporated into the regulatory files kept at the site. If Biennial Reports have not been filed, the DHS should be contacted to obtain the Department forms and filing regulations.

Documents have been generated by Harris Dracon for the emergency evacuation of the site and for hazardous materials handling training for employees. Both of these documents are

valuable sources of information for all employees; however, in some sections of the Hazardous Materials Training Manual references are made to the Casmalia Fire Department. All references to the Casmalia facility and appropriate actions for employees of the Casmalia should be modified so that all the material in the Hazardous Materials Training Manual for the Harris Dracon facility in Chatsworth is site specific to Chatsworth.

Harris Dracon has obtained permits from the SCAQMD for its spray booths, oven, and degreaser from the State of California Department of Industrial Relations for two of its compressors, and a City of Los Angeles Industrial Waste Control Permit for the discharge of wastewater to the City of Los Angeles sewer system (Table 3). All these permits have been maintained and kept up to date with the exception of the third compressor, for which requests for inspections have been made.

For the most part, Harris Dracon has operated within the permit conditions and terms for the SCAQMD permits. Several minor infractions have occurred over the course of operations although, according to material in the Harris Dracon files, all were settled to the satisfaction of the SCAQMD.

Geraghty & Miller recommends that Harris Dracon confirm in writing with the SCAQMD that all vents and the exhaust structures, particularly those in the Iridite Area and those associated with the plastic bag sealing machine, do not require permits or special emissions control devices. Geraghty & Miller also recommends bringing the vapor degreaser online as soon as possible and discontinuing the practice of wiping down the metal with TCA in the parking lot. If there will remain metal items that need to be wiped down by hand, alternatives such as permitted industrial exhaust hoods should be considered.

Additionally, the total air emissions of the facility should be quantified to ensure that the level is below 10 per year. If the level of emissions is found to be between 10 and 25 tons of any AB 2588 listed substance, total organic gas, particulate matter, nitrogen oxides, or sulfur oxides, an emissions inventory plan as outlined in the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) needs to be submitted to the SCAQMD.

Harris Dracon has had some difficulty remaining in compliance with its Industrial Waste Control permit for the discharge of its wastewater to the City of Los Angeles sewer system. This is partially caused by the increase in the stringency of the permit levels in 1986. Coupled with this, Harris Dracon has increased its production, which has made it difficult to keep within the permit limits. After each successive notifications, Harris Dracon followed the stipulations of its permit and attempted to find the reasons and remedy them. Although not much correspondence between Harris Dracon and the City of Los Angeles Department of Public Works exists in the Harris Dracon files, facility personnel reported that Harris Dracon worked closely with the City of Los Angeles to remedy its permit exceedences.

With the installation in 1990 of the filter press in the iridite process, Harris Dracon believes it has remedied the problem with its wastewater permit exceedences. This solution unfortunately causes a rather large amount of filter cake to be generated. This is particularly the case when the filter press is not working optimally.

It is suggested that careful records be maintained on the amount of waste generated by the filter press operation. It is possible that the cost to dispose of this material will warrant an in-depth waste minimization analysis to determine how the wastewater permit terms can be met without generating excessive amounts of filter cake.

Harris Dracon appears as Dracon Industries on the EPA CERCLIS. The reason why the EPA has placed the facility on the list has yet to be determined. The results of the FOIA request made by Geraghty & Miller will help determine why Dracon Industries appears on the CERCLIS. Once a facility is listed on the CERCLIS it is rather difficult to get it removed from the list.

Mr. Donald, White, Chief, Field Operations Branch, EPA Region IX, was contacted to determine how Harris Dracon could be removed from the CERCLIS. Mr. White stated that initially a Preliminary Assessment (PA) needs to be conducted by the EPA at the site. These assessments can be conducted in less than one week once the process is begun. The EPA, however, only conducts 300 PAs a year. Sites that have been listed more than two years have

priority over those listed more recently; however, the priority among sites listed greater than two years is not clearly defined. For instance, sites in one area may be assessed without considering if there are potentially more hazardous sites on the list. Similarly, just because a site is thought to have a low probability of being a hazardous waste site it is not necessarily reviewed. If after the PA is completed there is no evidence to suggest it is a hazardous waste site, then it is removed from the CERCLIS. If contamination is found or suspected, then a site investigation needs to be conducted. If the site investigation shows significant contamination, a Listing Site Investigation is conducted. Those sites scoring over 28.5 on the hazardous ranking system (HRS) during the Listing Site Investigation are added to the NPL.

Based on Phase 1 through Phase 3, there is little evidence for major environmental liabilities at the facility. The areas of potential environmental concern have not as of yet been conclusively identified as posing environmental liabilities to the Harris Corporations. Investigation of these areas in Phase 4 should assist with this determination.

RECOMMENDATIONS FOR PHASE 4 FIELD INVESTIGATION

Before undertaking a field investigation to determine if past or present waste handling practices have created environmental liabilities at the site, decisions concerning the level of characterization required need to be made. Harris Dracon has several possible options. The first option is to depend solely on information gathered in Phase 1 through Phase 3. Although several areas of environmental concern were identified, no routine hazardous substance or waste handling procedures or accidental releases of hazardous substances or wastes are known to have significantly impacted the soil or ground-water quality at Harris Dracon. Choosing to rely on Phase 1 through Phase 3 leaves a greater probability that an existing problem will go undetected.

A second available option is to conduct a soil gas survey at the site. This option involves the collection of vapor samples at numerous locations across the property to characterize the conditions beneath the property. Rather than a few isolated areas targeted for soil sampling, this option helps identify quantitatively the areas likely to have soil and/or ground-water conditions across the entire site. Following the identification of areas likely to have soil and/or ground-

water contamination, soil sampling would be conducted. The collection of samples for laboratory analysis is the best available method for determining site conditions and assessing potential environmental liabilities.

The third option available to Harris is the collection of soil samples only in those areas of potential environmental concern identified during Phase 1 through 3. By limiting the areas in which samples are collected, the overall costs of further investigation will be less; however, limiting the scope of the investigation to only those areas previously determined as potential areas of concern precludes the discovery of additional unsuspected areas that may pose environmental liabilities. Therefore, it is imperative that the overall objective and intent is clearly defined prior to initiating Phase 4 field investigation activities.

A sampling plan for the investigation of the five areas identified as areas of potential environmental concern is presented below. Cost estimates for conducting a soil gas survey as well as the costs for conducting the sampling outlined here is provided under a separate cover.

During Phase 1 through Phase 3, the following five areas have been identified that may have in the past or are currently impacting soil, and possibly ground-water quality beneath the facility. These areas include:

- o Iridite Area located in the northeast corner of the building;
- o Clarifier located along the eastern exterior of the building;
- o Hazardous Waste Storage Area on the north side of the building
- o Loading dock sump located in the topographically depressed shipping and receiving dock; and
- o Compressor/ Metal Degreasing (Northwest side of the exterior of the building).

IRIDITE AREA

It is recommended that the process material, both liquid and solid, that have accumulated within the bermed area be completely cleaned out. Once this has been accomplished, the floor should be steam cleaned and inspected for cracks, fissures, floor seams, and areas where the concrete floor has deteriorated. After inspection of the floor, areas where cracks, fissures, floor seams, or deteriorated concrete would be chosen as areas to be sampled. It is estimated that three locations will be identified for soil borings within the bermed Iridite Area. A concrete coring company will be subcontracted to cut open the concrete. Once holes have been advanced through the concrete, a hand auger will be used to collect continuous soil samples.

Geraghty & Miller proposes to advance soil borings in each of the areas of concern to a depth at which no evidence of contamination (based on field screening techniques) is observed, or to a maximum of fifteen feet (whichever is shallower). For each borehole, the soils encountered will be visually described and observed for any unusual staining and soil samples will be collected and field screened with a photoionization detector for evidence of volatile organic compounds. Two soil samples from each borehole will be submitted for laboratory analysis; one to characterize what appears to be the area with the greatest chemicals present and one to delineate the vertical extent of these chemicals. A matrix of the analytical parameters selected for samples collected in the Iridite Area are presented in Table 4.

Each boring will be filled with a grout mixture to ensure a complete "water tight" seal. Each location will be capped with concrete that is slightly raised to avoid liquids collecting at these locations in the future.

If through initial sampling in the iridite bermed area it is determined that further sampling is required to determine the vertical extent of chemicals, angled borings will be advanced with a drill rig in two locations along the exterior of the building.

Geraghty & Miller proposes to advance angled soil borings at the two exterior locations to a depth at which no evidence of contamination (based on field screening techniques) is

observed, or to a maximum of 25 feet (whichever is deeper). A minimum of two samples from each borehole will be submitted for laboratory analysis. Proposed soil boring locations are shown on Figure 7.

CLARIFIER AREA

Two soil sampling locations are proposed in the clarifier area on the east side of the building. One location is proposed along the pipeline that leads from the Iridite Area to the clarifier, the other is proposed alongside the clarifier itself (Figure 7). The soil borings will be advanced to a depth at which no evidence of contamination (based on field screening techniques) is observed, or to a maximum of 25 feet (whichever is deeper).

For each borehole, the soils encountered will be collected, described and field screened with a photoionization detector as previously mentioned. Again, two soil samples from each borehole will be submitted for laboratory analysis.

HAZARDOUS WASTE STORAGE AREA

Two soil sampling locations are proposed in the Hazardous Waste Storage Area. One is proposed just outside the northeast corner of the berm. Visible staining was noted in this area on photographs in the DHS Region III files. The second location, an angled boring, is sited for the area across from the TCA tank on the exterior of the berm. The protocols established for the field investigation will be maintained throughout this program.

LOADING DOCK SUMP

One boring location is proposed adjacent to the loading dock sump located in the topographically depressed shipping and receiving dock. Again, the methodology and protocols established will be adhered to.

COMPRESSOR/METAL DEGREASING (NORTHWEST SIDE OF THE BUILDING)

Four areas, including the TCA wipe down area, have been grouped together because of there relative proximity. One boring is proposed in each of these areas.

Geraghty & Miller will incorporate appropriate QA/QC procedures throughout the implementation of the field program. Upon receipt of analytical results, Geraghty will conduct a rigorous review of the analytical data to ensure that the results are valid. Following data validation, a letter report summarizing the results will be prepared and submitted to the Harris Corporation.

Prior to implementation of the field investigation, a Health & Safety Plan will be prepared to address OSH 29 CFR 1910.120 requirements and any facility concerns in conducting the proposed work in a safe manner.

LIMITATIONS OF THE SITE SURVEY

Geraghty & Miller, Inc. warrants that the services performed by Geraghty & Miller on the environmental baseline survey are performed in a competent and professional manner, in accordance with sound consulting practices and procedures. However, Geraghty & Miller cannot warrant the actual site condition. Even with due care and appropriate personnel present, there may remain unknown and hidden conditions that were not observed during the investigation. The evaluation of the site and its surroundings were based upon available, existing, and limited data; therefore, the risk or likelihood of environmental impairment at the site, though minimal, cannot be completely ruled out.

REFERENCES

Abdullah, Labeebah. 1990. Governor's Office of Emergency Services, Hazardous Materials Division. Personal Communication to Dana Coyle, Geraghty & Miller, Inc., November 1990.

California Chamber of Commerce. 1989. Hazardous Materials Handbook (Community Rightto-Know), Sacramento, California, 250 pp.

California Code of Regulations. 1990. Barclays Law Publishers, San Francisco, California, 940 pp.

California Safety Council. 1988. Hazardous Waste Management Guide. Los Angeles, California, 151 pp.

Cooper, Inspector. 1990. City of Los Angeles Fire Department Bureau of Fire Prevention/Hazardous Material Section. Personal Communication to Dana Coyle, Geraghty & Miller, Inc, November 1990.

Denney, Richard J. et al. 1989. California Environmental Law Handbook, Third Edition, Government Institutes, Inc.

Ensco Environmental Services, Inc. 1988. California Hazardous Materials Program Commentary, STP Specialty Technical Publishers Inc., Oakland, California.

Governors Office. Office of Planning and Research. 1990. Hazardous Waste and Substances Sites - List, Office of Permit Assistance, California, March, 305 pp.

Health & Safety Code (H&SC) 1988. California State Department of Health Services Hazardous Waste Control Law excerpt from the Health & Safety Code, Division 20, Sacramento, California, 343 pp.

Metropolitan Water District of Southern California. 1987. Groundwater Quality and its Impact on Water Supply in the Metropolitan Water District Service Area, Report No. 969, January.

State of California Air Resources Board. 1988. Technical Guidance Document to the Criteria and Guidelines Regulation for AB-2588, Sacramento, California, 287 pp.

State of California Department of Health Services. 1989. Abandoned Site Program Information System List (ASPIS), November 10, 1989.

State of California Department of Health Services. 1989. Health and Welfare Agency Toxic Substances Control Division. Expenditure Plan for the Hazardous Substance Cleanup Bond Act of 1984, (BEP), 711 pp.

State of California Department of Water Resources. 1980. Ground Water Basins in California: A Report of the Legislature in Response to Water Code 12924 State of California. The Resources Agency, Department of Water Resources Bulletin No. 118-80, Sacramento, California, 73 pp.

State of California Department of Water Resources. 1975. California's Ground Water, The Resources Agency, Department of Water Resources Bulletin No. 118, Sacramento, California, 135 pp.

Upper Los Angeles River Area, Water Master. 1990. Water master service in the Upper Los Angeles River Area, Los Angeles County, October 1, 1988 - September 30, 1989, Los Angeles, California, 103 pp.

- U.S. Environmental Protection Agency. Site/Event Listing, List-8, June 1990.
- U.S. Environmental Protection Agency. 1990. National Priorities List (NPL), March update.

DRACON.047

TABLE 1

MAJOR CHEMICALS USED AT HARRIS DRACON (PAGE 1 OF 3)

Area Used	Chemical Name	Approximate Yearly Quantities Used	Hazard Classification	Area Stored
Iridite Area	Aluminum Bifluoride	1,200 lbs.		Iridite Area
Iridite Area	Aluminum Etch #22 Sodium Hydroxide	1,992 lbs.	Corrosive	Iridite Area
Iridite Area Hazardous Waste Area	Ammonium Hydrogen Fluoride	600 lbs.		Hazardous Waste Area
Iridite Area	Carbon Dioxide Argon	9,120 cf	Corrosive	Iridite Area/Hazardous Waste Storage Area
Iridite Area	Caustic Soda	500 gallons		Iridite Area/Hazardous Waste Storage Area
Iridite Area	Cleaner A-126 Soap Zinc Nitrate	1,800 lbs.	Corrosive	Iridite Area
Iridite Area	Muriatic Acid	12 gallons		Iridite Area
Iridite Area	Deoxidizer N.C. Nitric Acid/Sulfuric Acid	720 gallons	Corrosive	Iridite Area
Iridite Area	Dispose Aid Sodium Metabisulfate	1,100 lbs.		Iridite Area

TABLE 1

MAJOR CHEMICALS USED AT HARRIS DRACON
(PAGE 2 OF 3)

Area Used	Chemical Name	Approximate Yearly Quantities Used	Hazard Classification	Area Stored
Iridite Area	Waste Sludge As, Cn, Cu, Zn as of Oct. 1990 Filter Cake	2,640 gallons	Regulated Material	Iridite Area
Metal Fabrication and Sawing and Deburring	1,1,1-Trichloroethane	33,000 lbs.	Other Regulated Material	Hazardous Waste Storage Area
Metal Fabrication	Doall 360	165 gallons	Non-Hazardous	Hazardous Waste Storage Area and Metal Fabrication Area
Metal Fabrication	Doall 390	220 gallons	Non-Hazardous	Hazardous Waste Storage Area and Metal Fabrication Area
Metal Fabrication	Doall 470	275 gallons	Non-Hazardous	Hazardous Waste Storage Area and Metal Fabrication Area
Metal Fabrication Maintenance	Waste Oil	430 gallons	Combustible Liquid	Hazardous Waste Storage Area
Metal Fabrication Maintenance	Waste Oil Water Soluble	200 gallons	Combustible Liquid	Hazardous Waste Storage Area
Plastics Area	Anti-Freeze Ethylene Glycol	20 gallons		Plastics Area

TABLE 1

MAJOR CHEMICALS USED AT HARRIS DRACON (PAGE 3 OF 3)

Area Used	Chemical Name	Approximate Yearly Quantities Used	Hazard Classification	Area Stored
Welding Area	Argon	8,064 cf		Welding Area
Welding Area	Carbon Dioxide Argon	9,120 cf		Welding Area
Welding Area	Helium	6,984 cf		Welding Area

DRATBL-A.047

TABLE 2

HARRIS DRACON HAZARDOUS WASTE GENERATION 1990*
(PAGE 1 OF 2)

Material	Quantity	Transporter	Designated Facility	Process
Waste 1,1,1-Trichloroethane (F001)	1475 gallons	Oil and Solvent Process Co.	Oil and Solvent Process Co. 1704 W. 1st Street Azusa, CA 91702	Metal Fabrication
Waste Petroleum Oil (CA Regulated Waste	850 gallons	Oil and Solvent Process Co.	Oil and Solvent Process Co. 1704 W. 1st Street Azusa, CA 91702	Metal Fabrication
RQ Hazardous Waste Liquid (ORME-9189)	1,100 gallons	Disposal Control Services	Pacific Treatment 2190 Main Street San Diego, CA 92113	Iridite Process
Waste Petroleum (0001)	45 gallons	Safety Kleen Corp.	Safety-Kleen Corp. 13024 Bradley Avenue Sylmar, CA 91342	Maintenance
Waste Corrosive Liquid (0002)	4,600 gallons	Disposal Control Services	Norris Industry 5215 S. Boyle Street Los Angeles, CA	Iridite Process
Hazardous Waste Liquid Waste Filters and Sludge Plating Bath Sediment Water (D004-D007)	10,200 lbs	Chemical Waste Management, Inc.	Chemical Water Management Inc. 35251 Old Skyline Road Kettleman City, CA 93239	Iridite Process

TABLE 2

HARRIS DRACON HAZARDOUS WASTE GENERATION 1990*
(PAGE 2 OF 2)

Material	Quantity	Transporter	Designated Facility	Process
Hazardous Waste Liquid Waste Filters and Sludge (D004-D007)	1,800 lbs.	Oil and Solvent Process Co.	Soil and Solvent Process Co. 1704 W. 1st Street Azusa, CA 991702	Iridite Process (Filter Press Operation)
Non-RCRA Hazardous Waste Solid (Waste Aluminum Hydroxide)	700 lbs.	Disposal Control Services	U.S. Ecology 12 miles south of Beatty, NV 89002	Iridite Process
Hazardous Waste Solid Filter Sludge (D004-D007)	6,300 lbs.	Chemical Waste Management Inc.	Chemical Waste Management Inc. 35251 Old Skyline Road Kettleman City, CA 93239	Iridite Process (Filter Press Operation)

NOTES:

* - Based on manifests in Harris Dracon facility files January, 1990 through November 26, 1990.

TABLE 3

HARRIS DRACON PERMITS AND HAZARDOUS MATERIALS LICENSES

Permitted Apparatus or License	Permit Number	Administering Agency	Permit or License Status
Clarifier Waste Water Discharge	3181321	LADPW	Current
Air Compressor Air Compressor	7259818/40509-66 517116/17719-72	CA DIR-DOSH CA DIR-DOSH	Current
Spray Booth Spray Booth Oven Degreaser	M31409 M31410 M31411 D33283	SCAQMD SCAQMD SCAQMD SCAQMD	Current Current Current Current
Public Health License	535335//10821	Los Angeles County	Current
Certificate of Disclosure of Hazardous Waste	335763-89	City of Los Angeles	Current
EPA Identification Number	CAD008508475	EPA	Current

NOTES:

LADPW - Los Angeles Department of Public Works (Department of Industrial Waste Control) CA DIR-DOSH - California Department of Industrial Relations Division of Safety & Health SCAQMD - South Coast Air Quality Management District

DRATBL-B.047

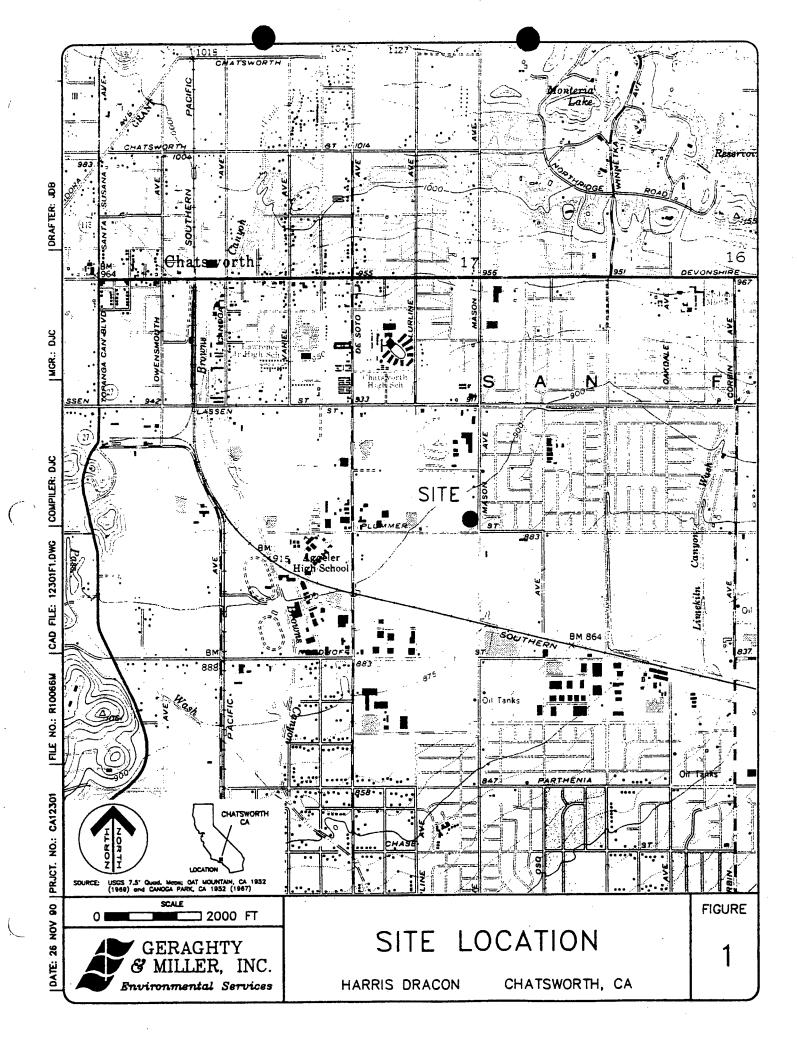
TABLE 4 PHASE 4 ANALYTICAL SCHEME

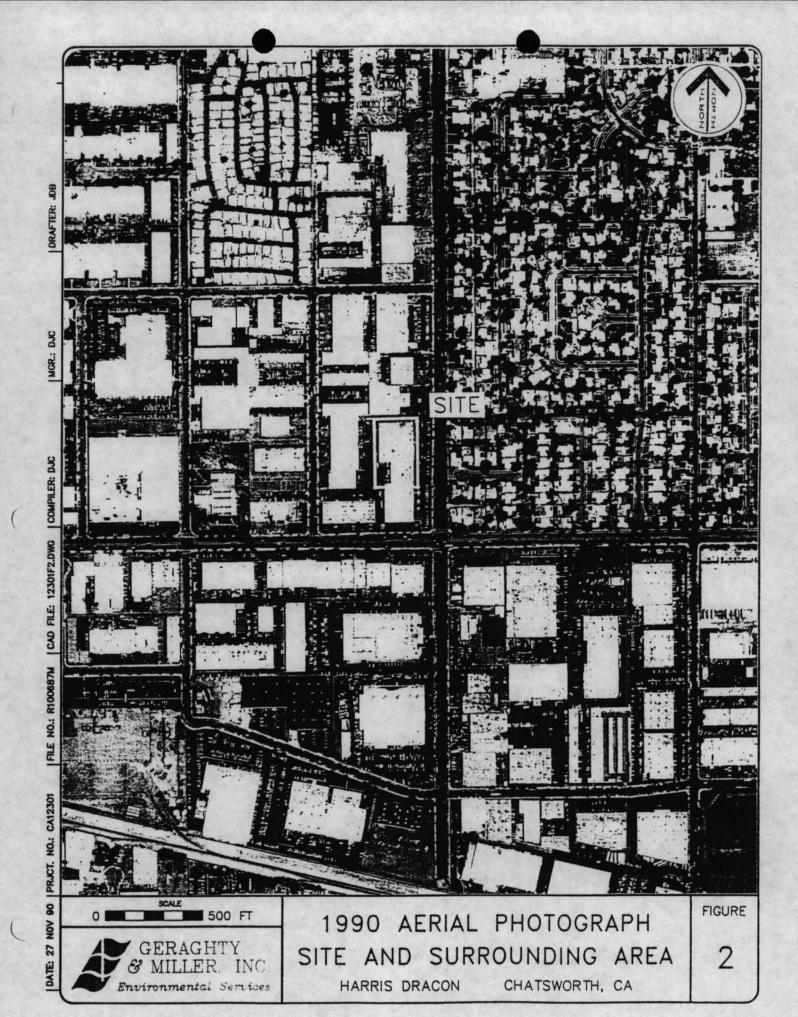
Area	VOCs	ТРН	Total Metals	Other*
"Iridite" Area	X		X	X
Clarifier	X		X	
Hazardous Waste Storage	х	X		X
Loading Dock Catch Basin/Drain	Х	Х	Х	
Compressor/Metal Degreasing	X	Χ .		
QA/QC				
Field Blanks	X	X	Х	Х
Trip Blanks	Х			X**

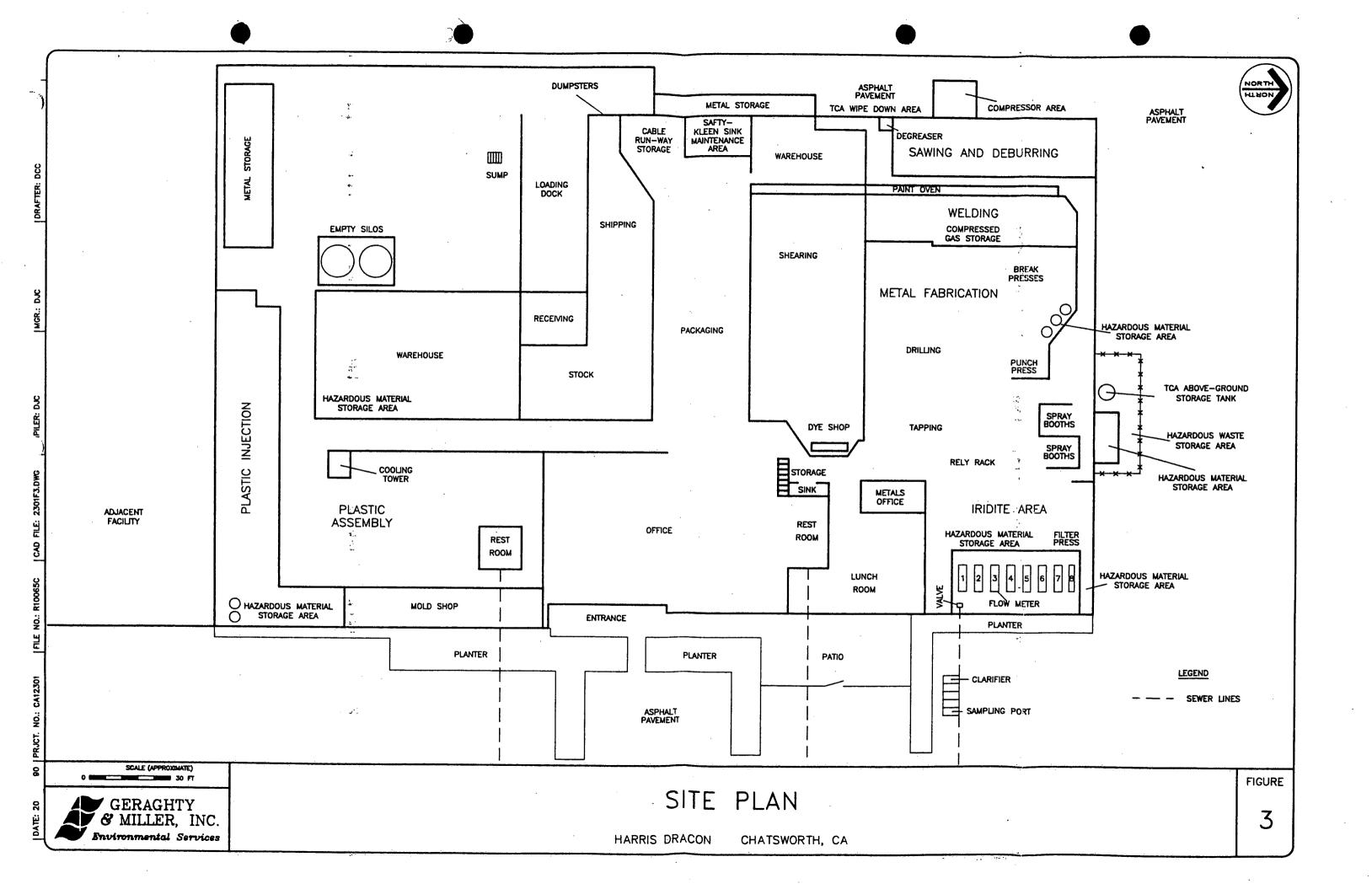
NOTES:

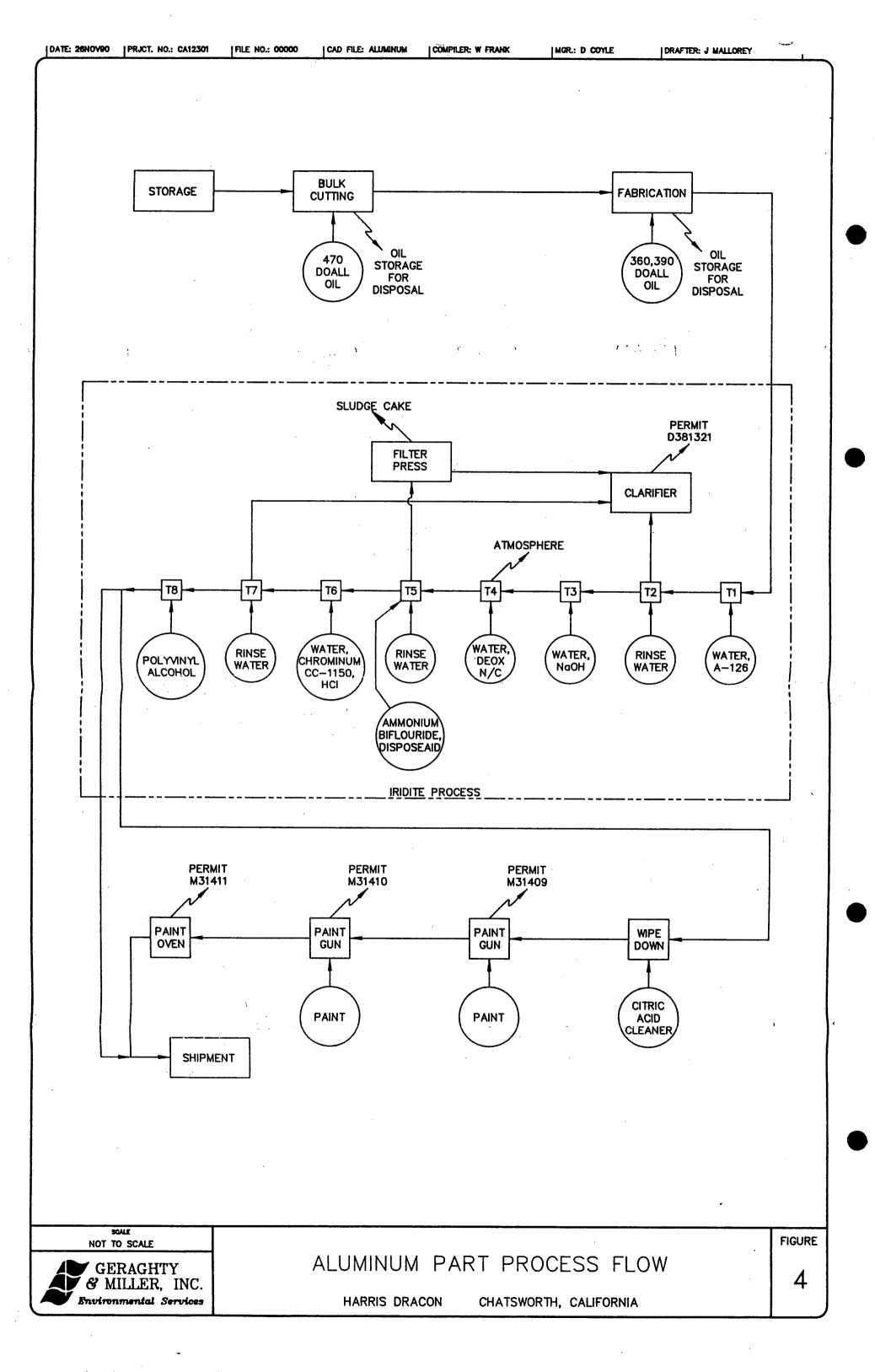
- "Other" analytes are defined in Table 3. Ammonia only.

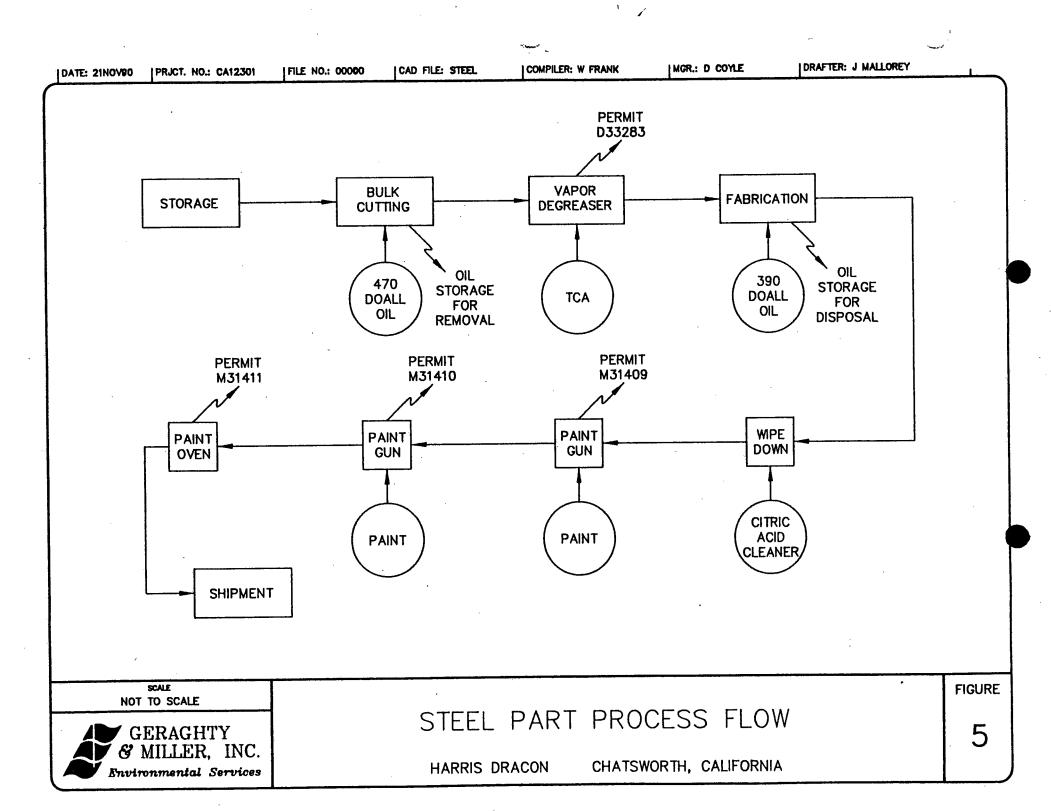
DRATBL-B.047

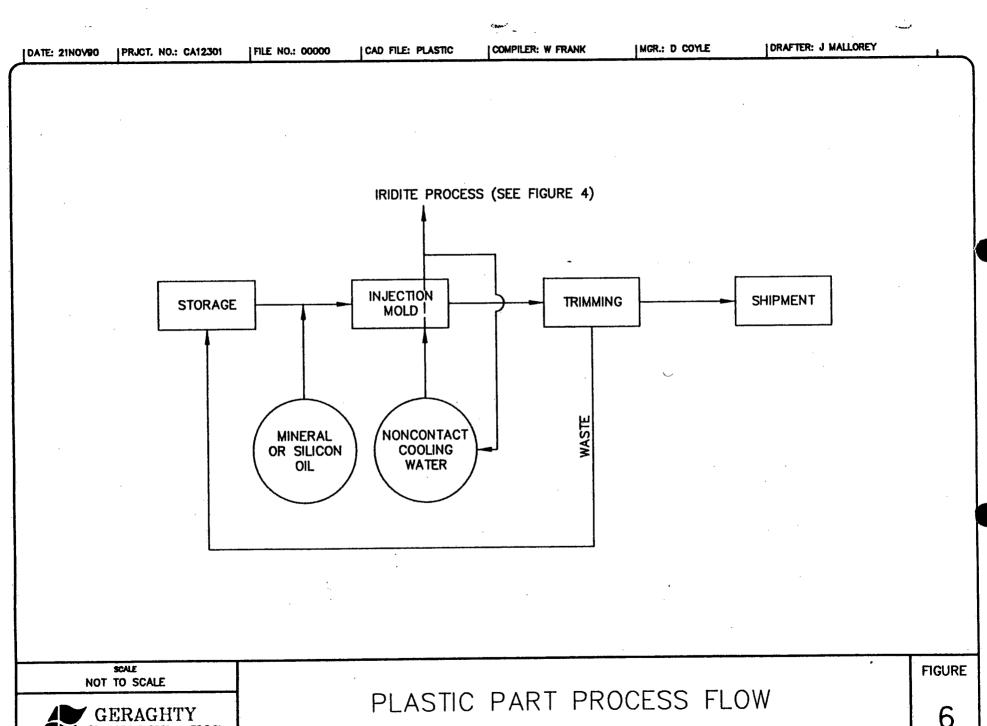












HARRIS DRACON

CHATSWORTH, CALIFORNIA

& MILLER, INC.

Environmental Services

6

